

REMARKS

This is in response to the Office Action mailed March 1, 2004, in which claims 1, 2, 9, 11, 12, 14, and 15 were rejected, claims 3-8, 12, 13, and 16 were objected to, and claims 17-23 were allowed. Editorial amendments have been made to claims 1-8, 12, and 16. Claims 10 and 17-23 are canceled. Claims 24-27 are withdrawn. New claims 28-38 are added. The pending claims are 1-9, 11-16, and 28-38.

Allowable Subject Matter

Claims 3-8, 12, 13, and 16 were objected to as being dependent upon a rejected base claim, but were allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims. New claim 28 corresponds to claim 3 rewritten in independent form. New claims 29-32 depend from claim 28, and correspond to dependent claims 5-8 which depend from claim 3. As indicated in the Office Action, claims 28-32 are in condition for allowance.

Claims 17-23 were allowed. However, with this Amendment, claims 17-23 are canceled, and new claims 33-38 are presented in their place. New claims 33-38 correspond to canceled claims 17-23, but contain editorial changes to simplify the claim language. More specifically, canceled claim 17 is rewritten as new claim 33, and canceled claims 18-20 are rewritten as new claims 34-36. Canceled claim 21 is rewritten as new claim 37, and canceled claim 23 is rewritten as new claim 38. Canceled claim 22 has not been rewritten.

None of the editorial changes made in new claims 33-38 change the scope of the claims from the subject matter allowed in claims 17-23. As such, new claims 33-38, which replace allowed claims 17-23, are likewise in condition for allowance.

Claim Rejections - 35 U.S.C. § 102

Claims 1-2, 9, 11-12, 14, and 15 were rejected under 35 U.S.C. § 102 as being anticipated by Nishihara et al. Independent claim 1 is directed at a method for fabricating tapered elements from a substrate having a size many times that of the tapered elements. The method comprises cutting the substrate a plurality of times in a first cutting direction, cutting the substrate a plurality of times along a second cutting direction, wherein the first cutting direction and the

second cutting direction intersect to form a feature angle less than about 90 degrees. As illustrated in Figures 2 and 9, the first and second cuts form the tapered sides of the element and result in an element having a trapezoidal shape.

Nishihara et al. do not disclose or suggest a tapered element, wherein the tapered sides of the element intersect to form a feature angle less than about 90 degrees. Rather, Nishihara et al. disclose a piezoelectric element having a support member and a freely vibrating portion. (Col. 2, ll. 39-52.) The elements are formed by grinding away portions of a substrate in rows or columns to form the freely vibrating portion of the element, while the portions not ground away form the support members. (Col. 2, ll. 52-67.) The substrate is then cut, including both the support members and the ground away vibrating portion, to create the individual elements. (Id.) As shown in Figure 4(c), the cuts made along the grinding areas 17a-17e intersect the cuts 16a-16p made to create individual elements at right angles. As such, the rejection should be withdrawn because Nishihara et al. do not disclose or suggest that the first cutting direction and the second cutting direction intersect to form a feature angle less than about 90 degrees.

With the above amendment and discussion, the claims are now in condition for allowance. Notification to that effect is respectfully requested. The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

Respectfully submitted,

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Date: June 1, 04

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